



BLISTER AGENTS/VESICANTS

Agent Overview:

Blister agents or vesicants are highly reactive chemicals that cause cellular level changes. Vesicants include distilled mustard (HD), mustard gas (H), mustard/lewisite (HL), mustard/T, sesqui mustard, sulfur mustard (H), nitrogen mustards (HN-1, HN-2, HN-3), lewisites (L, L-1, L-2, L-3), lewisites/chloroarsine agents, and phosgene oxime (CX). Signs and symptoms are often delayed by several hours after exposure. These agents cause redness and blistering of the skin, eye irritation, pain, swelling, tearing and blindness, nose and sinus pain, cough, sore throat, shortness of breath, abdominal pain, diarrhea, nausea and vomiting. Large exposures cause central nervous system effects: tremors, incoordination and seizures.

Lab Specimen Submittal:

Authorization by Dr. Jane Getchell, Director DPHL; Christina Pleasanton, Deputy Director DPHL; or Tara Lydick, Chemical Terrorism Coordinator.

Type of Specimens

Urine: 25mL-50mL screw-cap container

Necessary for Testing:

Whole blood:

- Three, 5 or 7 mL purple-top (EDTA) tubes (vacuum fill only) AND
- One, 5 or 7 mL gray-top or green-top (vacuum fill only) AND
- Two empty urine cups and two empty blood tubes for each lot # submitted.

Packaging Instructions:

Urine: freeze specimen upon collection and ship on dry ice; label specimens and package individually; wrap with absorbent material.

Whole blood: place filled tubes in a shipping rack for stability, wrap the tubes in absorbent material, and secure with tape. Place the packaged tubes in a secondary unbreakable container. Specimens may be shipped cold but *must not* be frozen.

All: wrap sample containers and layers with tamper-proof, waterproof forensic evidence tape initialed by collector, being careful not to cover the sample labels. Ship to DPHL as Biological Substance, Category B (Packing Instruction 650).

Receiving Specimens at DPHL:

Authorized specimens are received at the laboratory's rear (loading dock) entrance. Submitters must present ID and complete proper forms.

Handling of Specimens:

Follow chain of custody procedures. Freeze urine specimens.

Reporting Results:

Reference laboratory will notify DPHL as soon as possible. The Potential Exposure Call Log and Information form will provide information for notification of testing results outside of the DPHL.

Contact Information:

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